

METHOD AND APPARATUS FOR A CONTROL SIGNAL GENERATING CIRCUIT

ABSTRACT

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A control signal generating circuit (460) for an automatic frequency control (AFC) circuit (465), in accordance with the present invention receives a digital timing control signal directly from the output of a digital loop filter (138) of a tracking circuit (430), and produces a
10 frequency control signal that is provided to a VCXO (110). The control signal generating circuit (460) comprises a multiplier (462) and an integrator (466) which are relatively simple to implement, and does not require complex processing, such as determining an inverse tangent as taught by the prior. Consequently, approximation errors associated with
15 inverse tangent processing are avoided.

FIG. 4 accompanies the abstract.